

SEQUENCE LISTING

<110> Bienkowska, Jadwiga
 Mcallister, Gregg
 <120> Novel Preadipocyte Factor-1-Like Polypeptides
 <130> ARS.113
 <140> US 10/540,845
 <141> 2005-06-27
 <150> US 60/436,815
 <151> 2002-12-27
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 tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg tgt 265
 Cys Asp Leu Ala His Gly Cys Ala Pro Asp Gly Ser Cys Arg Cys
 35 40 45
 gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg cct 313
 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
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 ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac 361
 Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
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 agt ggc tgg gca ggc aag ttc tgt gac aaa ggc ttc cat ggg cgt gac 409
 Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Gly Phe His Gly Arg Asp
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Cys Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg			
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Asn Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr			
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tgc cgc tgc ttg gtg ggc ttt gtg ggt gcc cgc tgt gag gta aat gtg		553	
Cys Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val			
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Asp Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp			
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ggc ata aac cgc ttc tcc tgc ctc tgt cct gag ggc ttt gct gga cgc		649	
Gly Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg			
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ttc tgc acc atc aac ctg gat gac tgt gcc agc cgc cca tgc cag aga		697	
Phe Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg			
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ggg gcc cgc tgt cgg gac cgt gtc cac gac ttc gac tgc ctc tgc ccc		745	
Gly Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro			
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agt ggc tat ggt ggc aag acc tgt gag ctt gtc tta cct gtc cca gac		793	
Ser Gly Tyr Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp			
210	215	220	
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Pro Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val			
225	230	235	240
gta cct gcc acg ggg cca gcc ccc cac agc gca ggg gct ggt ctg ctg		889	
Val Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu			
245	250	255	
cgg atc tca gtg aag gag gtg gtg cgg agg caa gag gct ggg cta ggt		937	
Arg Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly			
260	265	270	
gag cct agc ttg gtg gcc ctg gtg ttt ggg gcc ctc act gct gcc		985	
Glu Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala			
275	280	285	
ctg gtt ctg gct act gtg ttg ctg acc ctg agg gcc tgg cgc cgg ggt		1033	
Leu Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly			
290	295	300	
gtc tgc ccc cct gga ccc tgt tgc tac cct gcc cca cac tat gct cca		1081	
Val Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro			
305	310	315	320
gcg tgc cag gac cag gag tgt cag gtt agc atg ctg cca gca ggg ctc		1129	
Ala Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu			
325	330	335	

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Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys			
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Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro			
50	55	60	
Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His			
65	70	75	80
Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Gly Phe His Gly Arg Asp			
85	90	95	
Cys Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg			
100	105	110	
Asn Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr			
115	120	125	
Cys Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val			
130	135	140	
Asp Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp			
145	150	155	160

Gly Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg
 165 170 175

Phe Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg
 180 185 190

Gly Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro
 195 200 205

Ser Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp
 210 215 220

Pro Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val
 225 230 235 240

Val Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu
 245 250 255

Arg Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly
 260 265 270

Glu Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala
 275 280 285

Leu Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly
 290 295 300

Val Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro
 305 310 315 320

Ala Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu
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Pro Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu
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Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His
 35 40 45

Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala
 50 55 60

Gly Lys Phe Cys Asp Lys Gly Phe His Gly Arg Asp Cys Glu Arg Lys
 65 70 75 80

Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln
 85 90 95

 Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu
 100 105 110

 Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu
 115 120 125

 Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg
 130 135 140

 Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile
 145 150 155 160

 Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys
 165 170 175

 Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly
 180 185 190

 Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr
 195 200 205

 Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr
 210 215 220

 Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val
 225 230 235 240

 Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu
 245 250 255

 Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala
 260 265 270

 Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro
 275 280 285

 Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp
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 Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu
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Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
 35 40 45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
 50 55 60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
 65 70 75 80

Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Gly Phe His Gly Arg Asp
 85 90 95

Cys Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg
 100 105 110

Asn Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr
 115 120 125

Cys Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val
 130 135 140

Asp Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp
 145 150 155 160

Gly Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg
 165 170 175

Phe Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg
 180 185 190

Gly Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro
 195 200 205

Ser Gly Tyr Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp
 210 215 220

Pro Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val
 225 230 235 240

Val Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu
 245 250 255

Arg Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly
 260 265 270

Glu Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala
 275 280 285

Leu Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly
 290 295 300

Val Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro
 305 310 315 320

Ala Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu

325	330	335
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His						
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Cys	His	Ser	Gly	Trp	Ala	Gly	Lys	Phe	Cys	Asp	Lys	Asp	Glu	His	Ile
				20				25					30		

Cys	Thr	Thr	Gln	Ser	Pro	Cys	Gln	Asn	Gly	Gly	Gln	Cys	Met	Tyr	Asp
				35			40				45				

Gly	Gly	Gly	Glu	Tyr	His	Cys	Val	Cys	Leu	Pro	Gly	Phe	His	Gly	Arg
				50		55			60						

Asp	Cys	Glu	Arg	Lys	Ala	Gly	Pro	Cys	Glu	Gln	Ala	Gly	Ser	Pro	Cys
65				70				75					80		

Arg	Asn	Gly	Gly	Gln	Cys	Gln	Asp	Asp	Gln	Gly	Phe	Ala	Leu	Asn	Phe
				85				90				95			

Thr	Cys	Arg	Cys	Leu	Val	Gly	Phe	Val	Gly	Ala	Arg	Cys	Glu	Val	Asn
				100				105				110			

Val	Asp	Asp	Cys	Leu	Met	Arg	Pro	Cys	Ala	Asn	Gly	Ala	Thr	Cys	Leu
				115		120					125				

Asp	Gly	Ile	Asn	Arg	Phe	Ser	Cys	Leu	Cys	Pro	Glu	Gly	Phe	Ala	Gly
		130			135					140					

Arg	Phe	Cys	Thr	Ile	Asn	Leu	Asp	Asp	Cys	Ala	Ser	Arg	Pro	Cys	Gln
145				150					155				160		

Arg	Gly	Ala	Arg	Cys	Arg	Asp	Arg	Val	His	Asp	Phe	Asp	Cys	Leu	Cys
				165				170				175			

Pro	Ser	Gly	Tyr	Gly	Gly	Lys	Thr	Cys	Glu	Leu	Val	Leu	Pro	Val	Pro
				180				185				190			

Asp	Pro	Pro	Thr	Thr	Val	Asp	Thr	Pro	Leu	Gly	Pro	Thr	Ser	Ala	Val
				195				200				205			

Val	Val	Pro	Ala	Thr	Gly	Pro	Ala	Pro	His	Ser	Ala	Gly	Ala	Gly	Leu
				210			215				220				

Leu	Arg	Ile	Ser	Val	Lys	Glu	Val	Val	Arg	Arg	Gln	Glu	Ala	Gly	Leu
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225	230	235	240
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Gly	Glu	Pro	Ser	Leu	Val	Ala	Leu	Val	Val	Phe	Gly	Ala	Leu	Thr	Ala
				245				250						255	

Ala	Leu	Val	Leu	Ala	Thr	Val	Leu	Leu	Thr	Leu	Arg	Ala	Trp	Arg	Arg
				260				265					270		

Gly	Val	Cys	Pro	Pro	Gly	Pro	Cys	Cys	Tyr	Pro	Ala	Pro	His	Tyr	Ala
					275			280					285		

Pro	Ala	Cys	Gln	Asp	Gln	Glu	Cys	Gln	Val	Ser	Met	Leu	Pro	Ala	Gly
				290			295				300				

Leu	Pro	Leu	Pro	Arg	Asp	Leu	Pro	Pro	Glu	Pro	Gly	Lys	Thr	Thr	Ala
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Leu

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				20				25					30		

Cys	Gln	Asn	Gly	Gly	Gln	Cys	Met	Tyr	Asp	Gly	Gly	Glu	Tyr	His
					35		40					45		

Cys	Val	Cys	Leu	Pro	Gly	Phe	His	Gly	Arg	Asp	Cys	Glu	Arg	Lys	Ala
					50		55				60				

Gly	Pro	Cys	Glu	Gln	Ala	Gly	Ser	Pro	Cys	Arg	Asn	Gly	Gly	Gln	Cys
65					70				75			80			

Gln	Asp	Asp	Gln	Gly	Phe	Ala	Leu	Asn	Phe	Thr	Cys	Arg	Cys	Ile	Val
					85			90					95		

Gly	Phe	Val	Gly	Ala	Arg	Cys	Glu	Val	Asn	Val	Asp	Asp	Cys	Ile	Met
					100			105					110		

Arg	Pro	Cys	Ala	Asn	Gly	Ala	Thr	Cys	Leu	Asp	Gly	Ile	Asn	Arg	Phe
					115			120				125			

Ser	Cys	Leu	Cys	Pro	Glu	Gly	Phe	Ala	Gly	Arg	Phe	Cys	Thr	Ile	Asn
					130			135			140				

Leu	Asp	Asp	Cys	Ala	Ser	Arg	Pro	Cys	Gln	Arg	Gly	Ala	Arg	Cys	Arg
145					150				155			160			

Asp	Arg	Val	His	Asp	Phe	Asp	Cys	Leu	Cys	Pro	Ser	Gly	Tyr	Gly	Gly
					165			170				175			

Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val
 180 185 190

Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly
 195 200 205

Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys
 210 215 220

Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val
 225 230 235 240

Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr
 245 250 255

Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly
 260 265 270

Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln
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Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu
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 Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
 20 25 30

tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg tgt 144
 Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
 35 40 45

gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg cct 192
 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
 50 55 60

ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac 240
 Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
 65 70 75 80

agt ggc tgg gca gat gaa cat atc tgt acc acg cag tcc ccc tgc cag	288
Ser Gly Trp Ala Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln	
85 90 95	
aat gga ggc cag tgc atg tat gac ggg ggc ggt gag tac cat tgt gtg	336
Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Glu Tyr His Cys Val	
100 105 110	
tgc tta cca ggc ttc cat ggg cgt gac tgc gag cgc aag gct gga ccc	384
Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro	
115 120 125	
tgt gaa cag gca ggc tcc cca tgc cgc aat ggc ggg cag tgc cag gac	432
Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp	
130 135 140	
gac cag ggc ttt gct ctc aac ttc acg tgc cgc tgc ttg gtg ggc ttt	480
Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe	
145 150 155 160	
gtg ggt gcc cgc tgt gag gta aat gtg gat gac tgc ctg atg cgg cct	528
Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro	
165 170 175	
tgt gct aac ggt gcc acc tgc ctt gac ggc ata aac cgc ttc tcc tgc	576
Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys	
180 185 190	
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Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp	
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Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg	
210 215 220	
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Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly Lys Thr	
225 230 235 240	
tgt gag ctt gtc tta cct gtc cca gac ccc cca acc aca gtg gac acc	768
Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr	
245 250 255	
cct cta ggg ccc acc tca gct gta gtg gta cct gcc acg ggg cca gcc	816
Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala	
260 265 270	
ccc cac agc gca ggg gct ggt ctg ctg cgg atc tca gtg aag gag gtg	864
Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val	
275 280 285	
gtg cgg agg caa gag gct ggg cta ggt gag cct agc ttg gtg gcc ctg	912
Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu	
290 295 300	
gtg gtg ttt ggg gcc ctc act gct gcc ctg gtt ctg gct act gtg ttg	960
Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu	

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Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys				
325		330	335	
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Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys				
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Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro				
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Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys				
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Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro				
50	55	60		
Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His				
65	70	75	80	
Ser Gly Trp Ala Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln				
85	90	95		
Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Glu Tyr His Cys Val				
100	105	110		
Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro				
115	120	125		
Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp				
130	135	140		
Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe				
145	150	155	160	
Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro				
165	170	175		

Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys
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 Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp
 195 200 205
 Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg
 210 215 220
 Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly Lys Thr
 225 230 235 240
 Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr
 245 250 255
 Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala
 260 265 270
 Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val
 275 280 285
 Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu
 290 295 300
 Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu
 305 310 315 320
 Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys
 325 330 335
 Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys
 340 345 350
 Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro
 355 360 365
 Pro Glu Pro Gly Lys Thr Thr Ala Leu
 370 375

<210> 9
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<400> 9

Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His Cys Asp Leu Ala
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 His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys Asp Pro Gly Trp
 20 25 30
 Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His
 35 40 45
 Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala
 50 55 60

Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln
 65 70 75 80

Cys Met Tyr Asp Gly Gly Glu Tyr His Cys Val Cys Leu Pro Gly
 85 90 95

Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala
 100 105 110

Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe
 115 120 125

Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe Val Gly Ala Arg
 130 135 140

Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro Cys Ala Asn Gly
 145 150 155 160

Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu
 165 170 175

Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser
 180 185 190

Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg Val His Asp Phe
 195 200 205

Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val
 210 215 220

Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr Pro Leu Gly Pro
 225 230 235 240

Thr Ser Ala Val Val Pro Ala Thr Gly Pro Ala Pro His Ser Ala
 245 250 255

Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val Val Arg Arg Gln
 260 265 270

Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu Val Val Phe Gly
 275 280 285

Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu Leu Thr Leu Arg
 290 295 300

Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala
 305 310 315 320

Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys Gln Val Ser Met
 325 330 335

Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly
 340 345 350

Lys Thr Thr Ala Leu
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<210> 10

<211> 383
 <212> PRT
 <213> homo sapiens

<400> 10

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile
 1 5 10 15

Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
 20 25 30

Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
 35 40 45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
 50 55 60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
 65 70 75 80

Ser Gly Trp Ala Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln
 85 90 95

Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Glu Tyr His Cys Val
 100 105 110

Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro
 115 120 125

Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp
 130 135 140

Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe
 145 150 155 160

Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro
 165 170 175

Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys
 180 185 190

Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp
 195 200 205

Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg
 210 215 220

Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly Lys Thr
 225 230 235 240

Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr
 245 250 255

Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala
 260 265 270

Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val
 275 280 285

Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu
 290 295 300

Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu
 305 310 315 320

Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys
 325 330 335

Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys
 340 345 350

Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro
 355 360 365

Pro Glu Pro Gly Lys Thr Thr Ala Leu His His His His His His
 370 375 380

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 <211> 420
 <212> DNA
 <213> homo sapiens

<220>
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 <222> (1)..(402)

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 Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile
 1 5 10 15

ctg ggg gct ccc ggt cag cct gtc cga gcc gat gac tgc agc tcc cac 96
 Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
 20 25 30

tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg tgt 144
 Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
 35 40 45

gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg cct 192
 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
 50 55 60

ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac 240
 Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
 65 70 75 80

agt ggc tgg gca ggc aag ttc tgt gac aaa gat gaa cat atc tgt acc 288
 Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr
 85 90 95

acg cag tcc ccc tgc cag aat gga ggc cag tgc atg tat gac ggg ggc 336
 Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly
 100 105 110

ggt gag tac cat tgt gtg tgc tta cca ggc ttc cat ggg cgt gac tgc 384
 Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys
 115 120 125

gag cgc aag gct gga ccc caccatcacc atcaccat 420
 Glu Arg Lys Ala Gly Pro
 130

<210> 12
 <211> 134
 <212> PRT
 <213> homo sapiens

<400> 12

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile
 1 5 10 15

Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
 20 25 30

Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
 35 40 45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
 50 55 60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
 65 70 75 80

Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr
 85 90 95

Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly
 100 105 110

Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys
 115 120 125

Glu Arg Lys Ala Gly Pro
 130

<210> 13
 <211> 114
 <212> PRT
 <213> homo sapiens

<400> 13

Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His Cys Asp Leu Ala
 1 5 10 15

His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys Asp Pro Gly Trp
 20 25 30

Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His
 35 40 45

Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala
 50 55 60

Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr Thr Gln Ser Pro
 65 70 75 80

Cys Gln Asn Gly Gln Cys Met Tyr Asp Gly Gly Glu Tyr His
 85 90 95

Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala
 100 105 110

Gly Pro

<210> 14

<211> 140

<212> PRT

<213> homo sapiens

<400> 14

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile
 1 5 10 15

Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
 20 25 30

Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
 35 40 45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
 50 55 60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
 65 70 75 80

Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr
 85 90 95

Thr Gln Ser Pro Cys Gln Asn Gly Gln Cys Met Tyr Asp Gly Gly
 100 105 110

Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys
 115 120 125

Glu Arg Lys Ala Gly Pro His His His His His
 130 135 140

<210> 15

<211> 1167

<212> DNA

<213> homo sapiens

<220>

<221> CDS

<222> (1)..(1149)

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Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile				
1 5 10 15				
ctg ggg gct ccc ggt cag cct gtc cga gcc gat gac tgc agc tcc cac				96
Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His				
20 25 30				
tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg tgt				144
Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys				
35 40 45				
gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg cct				192
Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro				
50 55 60				
ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac				240
Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His				
65 70 75 80				
agt ggc tgg gca ggc aag ttc tgt gac aaa gat gaa cat atc tgt acc				288
Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr				
85 90 95				
acg cag tcc ccc tgc cag aat gga ggc cag tgc atg tat gac ggg ggc				336
Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly				
100 105 110				
ggt gag tac cat tgt gtg tgc tta cca ggc ttc cat ggg cgt gac tgc				384
Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys				
115 120 125				
gag cgc aag gct gga ccc tgt gaa cag gca ggc tcc cca tgc cgc aat				432
Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn				
130 135 140				
ggc ggg cag tgc cag gac gac cag ggc ttt gct ctc aac ttc acg tgc				480
Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys				
145 150 155 160				
cgc tgc ttg gtg ggc ttt gtg ggt gcc cgc tgt gag gta aat gtg gat				528
Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp				
165 170 175				
gac tgc ctg atg cgg cct tgt gct aac ggt gcc acc tgc ctt gac ggc				576
Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly				
180 185 190				
ata aac cgc ttc tcc tgc ctc tgt cct gag ggc ttt gct gga cgc ttc				624
Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe				
195 200 205				
tgc acc atc aac ctg gat gac tgt gcc agc cgc cca tgc cag aga ggg				672
Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly				
210 215 220				

gcc cgc tgt cgg gac cgt gtc cac gac ttc gac tgc ctc tgc ccc agt	720
Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser	
225 230 235 240	
ggc tat ggt ggc aag acc tgt gag ctt gtc tta cct gtc cca gac ccc	768
Gly Tyr Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro	
245 250 255	
cca acc aca gtg gac acc cct cta ggg ccc acc tca gct gta gtg gta	816
Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val	
260 265 270	
cct gcc acg ggg cca gcc ccc cac agc gca ggg gct ggt ctg ctg cgg	864
Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg	
275 280 285	
atc tca gtg aag gag gtg gtg cgg agg caa gag gct ggg cta ggt gag	912
Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu	
290 295 300	
cct agc ttg gtg gcc ctg gtg ttt ggg gcc ctc act gct gcc ctg	960
Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu	
305 310 315 320	
gtt ctg gct act gtg ttg ctg acc ctg agg gcc tgg cgc cgg ggt gtc	1008
Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val	
325 330 335	
tgc ccc cct gga ccc tgt tgc tac cct gcc cca cac tat gct cca gcg	1056
Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala	
340 345 350	
tgc cag gac cag gag tgt cag gtt agc atg ctg cca gca ggg ctc ccc	1104
Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu Pro	
355 360 365	
ctg cca cgt gac ttg ccc cct gag cct gga aag acc aca gca ctg	1149
Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu	
370 375 380	
caccatcacc atcaccat	1167

<210> 16
 <211> 383
 <212> PRT
 <213> homo sapiens

<400> 16

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile	
1 5 10 15	
Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His	
20 25 30	
Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys	
35 40 45	

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
 50 55 60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
 65 70 75 80

Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr
 85 90 95

Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly
 100 105 110

Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys
 115 120 125

Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn
 130 135 140

Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys
 145 150 155 160

Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp
 165 170 175

Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly
 180 185 190

Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe
 195 200 205

Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly
 210 215 220

Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser
 225 230 235 240

Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro
 245 250 255

Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val
 260 265 270

Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg
 275 280 285

Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu
 290 295 300

Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu
 305 310 315 320

Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val
 325 330 335

Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala
 340 345 350

Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu Pro
 355 360 365

Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu
 370 375 380

<210> 17
 <211> 363
 <212> PRT
 <213> homo sapiens

<400> 17

Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His Cys Asp Leu Ala
 1 5 10 15

His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys Asp Pro Gly Trp
 20 25 30

Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His
 35 40 45

Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala
 50 55 60

Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr Thr Gln Ser Pro
 65 70 75 80

Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Gly Glu Tyr His
 85 90 95

Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala
 100 105 110

Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys
 115 120 125

Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val
 130 135 140

Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met
 145 150 155 160

Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe
 165 170 175

Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn
 180 185 190

Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg
 195 200 205

Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Gly
 210 215 220

Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val
 225 230 235 240

Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly
 245 250 255

Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys
 260 265 270

Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val
 275 280 285

Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr
 290 295 300

Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly
 305 310 315 320

Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln
 325 330 335

Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp
 340 345 350

Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu
 355 360

<210> 18

<211> 389

<212> PRT

<213> homo sapiens

<400> 18

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile
 1 5 10 15

Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
 20 25 30

Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
 35 40 45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
 50 55 60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
 65 70 75 80

Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr
 85 90 95

Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly
 100 105 110

Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys
 115 120 125

Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn
 130 135 140

Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys
 145 150 155 160

Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp
 165 170 175

Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly
 180 185 190

Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe
 195 200 205

Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly
 210 215 220

Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser
 225 230 235 240

Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro
 245 250 255

Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val
 260 265 270

Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg
 275 280 285

Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu Gly Glu
 290 295 300

Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala Ala Leu
 305 310 315 320

Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg Gly Val
 325 330 335

Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala
 340 345 350

Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly Leu Pro
 355 360 365

Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala Leu His
 370 375 380

His His His His His
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<210> 19
 <211> 37
 <212> DNA
 <213> Artificial sequence

<220>
 <223> SCS0009SV3-EX1 primer

<400> 19
 aaggcaggctt cgccaccatg cccagcggct gcccgtt

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<210> 20
<211> 35
<212> DNA
<213> Artificial sequence

<220>
<223> SCS0009SV3-EX2 primer

<400> 20
gtgatggta tggtgcagtg ctgtggtctt tccag 35

<210> 21
<211> 37
<212> DNA
<213> Artificial sequence

<220>
<223> GCP Forward

<400> 21
ggggacaagt ttgtacaaaa aagcaggctt cgccacc 37

<210> 22
<211> 51
<212> DNA
<213> Artificial sequence

<220>
<223> GCP Reverse

<400> 22
ggggaccact ttgtacaaga aagctgggtt tcaatggta tggtgatggt g 51

<210> 23
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> SCS0009SV3-SP1 primer

<400> 23
tgatgcggcc ttgtgctaac 20

<210> 24
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> pEAK12F primer

<400> 24
gccagcttgg cacttgatgt 20

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<210> 25		
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<212> DNA		
<213> Artificial sequence		
<220>		
<223> pEAK12R primer		
<400> 25		
gatggaggtg gacgtgtcag	20	
<210> 26		
<211> 18		
<212> DNA		
<213> Artificial sequence		
<220>		
<223> 21M13 primer		
<400> 26		
tgtaaaacga cggccagt	18	
<210> 27		
<211> 18		
<212> DNA		
<213> Artificial sequence		
<220>		
<223> M13REV primer		
<400> 27		
caggaaacag ctatgacc	18	
<210> 28		
<211> 20		
<212> DNA		
<213> Artificial sequence		
<220>		
<223> T7 primer		
<400> 28		
taatacgact cactataggg	20	
<210> 29		
<211> 18		
<212> DNA		
<213> Artificial sequence		
<220>		
<223> SP6 primer		
<400> 29		
atttaggtga cactatacg	18	

<210> 30
<211> 37
<212> DNA
<213> Artificial sequence

<220>
<223> SCS0009SV4-EX1 primer

<400> 30
aagcaggctt cgccaccatg cccagcggtt gccgctg 37

<210> 31
<211> 35
<212> DNA
<213> Artificial sequence

<220>
<223> SCS0009SV4-EX2 primer

<400> 31
gtgatggta tgggggttc cagcattgcg ctgcg 35

<210> 32
<211> 34
<212> DNA
<213> Artificial sequence

<220>
<223> SCS0009-AP1 primer

<400> 32
accatgccca gcggctgccc ctgcctgcattt ctgcg 34

<210> 33
<211> 36
<212> DNA
<213> Artificial sequence

<220>
<223> SCS0009-AP2 primer

<400> 33
agtacgccc atgaaaggct ttgtcacaga acttgc 36

<210> 34
<211> 38
<212> DNA
<213> Artificial sequence

<220>
<223> SCS0009-AP3 primer

<400> 34

gcaagttctg tgacaaaggc ttccatgggc gtgactgc	38
<210> 35	
<211> 39	
<212> DNA	
<213> Artificial sequence	
<220>	
<223> SCS0009-AP4 primer	
<400> 35	
tcacagtgct gtggctttc caggctcagg gggcaagtc	39
<210> 36	
<211> 37	
<212> DNA	
<213> Artificial sequence	
<220>	
<223> SCS0009-EX1 primer	
<400> 36	
aaggcaggctt cgccaccatg cccagcggtt gccgctg	37
<210> 37	
<211> 35	
<212> DNA	
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<220>	
<223> SCS0009-EX2 primer	
<400> 37	
gtgatggta tggtgcaagtg ctgtggtctt tccag	35
<210> 38	
<211> 385	
<212> PRT	
<213> Mus musculus	
<400> 38	
Met Ile Ala Thr Gly Ala Leu Leu Arg Val Leu Leu Leu Leu Ala	
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20 25 30	
Gln Tyr Gly Phe Cys Glu Ala Asp Asn Val Cys Arg Cys His Val Gly	
35 40 45	
Trp Glu Gly Pro Leu Cys Asp Lys Cys Val Thr Ala Pro Gly Cys Val	
50 55 60	
Asn Gly Val Cys Lys Glu Pro Trp Gln Cys Ile Cys Lys Asp Gly Trp	

65	70	75	80
Asp Gly Lys Phe Cys Glu Ile Asp Val Arg Ala Cys Thr Ser Thr Pro			
85		90	95
Cys Ala Asn Asn Gly Thr Cys Val Asp Leu Glu Lys Gly Gln Tyr Glu			
100		105	110
Cys Ser Cys Thr Pro Gly Phe Ser Gly Lys Asp Cys Gln His Lys Ala			
115		120	125
Gly Pro Cys Val Ile Asn Gly Ser Pro Cys Gln His Gly Gly Ala Cys			
130		135	140
Val Asp Asp Glu Gly Gln Ala Ser His Ala Ser Cys Leu Cys Pro Pro			
145		150	155
160			
Gly Phe Ser Gly Asn Phe Cys Glu Ile Val Ala Ala Thr Asn Ser Cys			
165		170	175
Thr Pro Asn Pro Cys Glu Asn Asp Gly Val Cys Thr Asp Ile Gly Gly			
180		185	190
Asp Phe Arg Cys Arg Cys Pro Ala Gly Phe Val Asp Lys Thr Cys Ser			
195		200	205
Arg Pro Val Ser Asn Cys Ala Ser Gly Pro Cys Gln Asn Gly Gly Thr			
210		215	220
Cys Leu Gln His Thr Gln Val Ser Phe Glu Cys Leu Cys Lys Pro Pro			
225		230	235
240			
Phe Met Gly Pro Thr Cys Ala Lys Lys Arg Gly Ala Ser Pro Val Gln			
245		250	255
Val Thr His Leu Pro Ser Gly Tyr Gly Leu Thr Tyr Arg Leu Thr Pro			
260		265	270
Gly Val His Glu Leu Pro Val Gln Gln Pro Glu Gln His Ile Leu Lys			
275		280	285
Val Ser Met Lys Glu Leu Asn Lys Ser Thr Pro Leu Leu Thr Glu Gly			
290		295	300
Gln Ala Ile Cys Phe Thr Ile Leu Gly Val Leu Thr Ser Leu Val Val			
305		310	315
320			
Leu Gly Thr Val Ala Ile Val Phe Leu Asn Lys Cys Glu Thr Trp Val			
325		330	335
Ser Asn Leu Arg Tyr Asn His Thr Phe Arg Lys Lys Asn Leu Leu			
340		345	350
Leu Gln Tyr Asn Ser Gly Glu Glu Leu Ala Val Asn Ile Ile Phe Pro			
355		360	365
Glu Lys Ile Asp Met Thr Phe Asn Lys Glu Ala Gly Asp Glu Glu			
370		375	380

Ile
385

<210> 39
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<213> Homo sapiens

<400> 39

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile
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Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
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Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
35 40 45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
50 55 60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
65 70 75 80

Ser Gly Trp Ala Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln
85 90 95

Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Glu Tyr His Cys Val
100 105 110

Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro
115 120 125

Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp
130 135 140

Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe
145 150 155 160

Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro
165 170 175

Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys
180 185 190

Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp
195 200 205

Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg
210 215 220

Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Lys Thr
225 230 235 240

Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr
245 250 255

Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala
 260 265 270

Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val
 275 280 285

Val Arg Arg Gln Glu Ala
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Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile
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Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
 20 25 30

Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
 35 40 45

Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
 50 55 60

Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
 65 70 75 80

Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr
 85 90 95

Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly
 100 105 110

Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys
 115 120 125

Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn
 130 135 140

Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys
 145 150 155 160

Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn Val Asp
 165 170 175

Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly
 180 185 190

Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe
 195 200 205

Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly
 210 215 220

Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys Pro Ser
 225 230 235 240

Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro Asp Pro
 245 250 255

Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val Val Val
 260 265 270

Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu Leu Arg
 275 280 285

Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala
 290 295 300

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 Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His
 20 25 30

tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg tgt 144
 Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys
 35 40 45

gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg cct 192
 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro
 50 55 60

ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac 240
 Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His
 65 70 75 80

agt ggc tgg gca gat gaa cat atc tgt acc acg cag tcc ccc tgc cag 288
 Ser Gly Trp Ala Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln
 85 90 95

aat gga ggc cag tgc atg tat gac ggg ggc ggt gag tac cat tgt gtg 336
 Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly Glu Tyr His Cys Val
 100 105 110

tgc tta cca ggc ttc cat ggg cgt gac tgc gag cgc aag gct gga ccc 384
 Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro
 115 120 125

tgt gaa cag gca ggc tcc cca tgc cgc aat ggc ggg cag tgc cag gac	432
Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp	
130 135 140	
gac cag ggc ttt gct ctc aac ttc acg tgc cgc tgc ttg gtg ggc ttt	480
Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe	
145 150 155 160	
gtg ggt gcc cgc tgt gag gta aat gtg gat gac tgc ctg atg cgg cct	528
Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro	
165 170 175	
tgt gct aac ggt gcc acc tgc ctt gac ggc ata aac cgc ttc tcc tgc	576
Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys	
180 185 190	
ctc tgt cct gag ggc ttt gct gga cgc ttc tgc acc atc aac ctg gat	624
Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp	
195 200 205	
gac tgt gcc agc cgc cca tgc cag aga ggg gcc cgc tgt cgg gac cgt	672
Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg	
210 215 220	
gtc cat gac ttc gac tgc ctc tgc ccc agt ggc tat ggt ggc aag act	720
Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Lys Thr	
225 230 235 240	
tgt gag ctt gtc tta cct gtc cca gac ccc cca acc aca gtg gac acc	768
Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr	
245 250 255	
cct cta ggg ccc acc tca gct gta gtg gta cct gcc acg ggg cca gcc	816
Pro Leu Gly Pro Thr Ser Ala Val Val Pro Ala Thr Gly Pro Ala	
260 265 270	
ccc cac agc gca ggg gct ggt ctg ctg cgg atc tca gtg aag gag gtg	864
Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val	
275 280 285	
gtg cgg agg caa gag gct ggg cta ggt gag cct agc ttg gtg gcc ctg	912
Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu	
290 295 300	
gtg gtg ttt ggg gcc ctc act gct gcc ctg gtt ctg gct act gtg ttg	960
Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu	
305 310 315 320	
ctg acc ctg agg gcc tgg cgc cgg ggt gtc tgc ccc cct gga ccc tgt	1008
Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys	
325 330 335	
tgc tac cct gcc cca cac tat gct cca gcg tgc cag gac cag gag tgt	1056
Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys	
340 345 350	
cag gtt agc atg ctg cca gca ggg ctc ccc ctg cca cgt gac ttg ccc	1104
Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro	
355 360 365	

cct gag cct gga aag acc aca gca ctg	1131
Pro Glu Pro Gly Lys Thr Thr Ala Leu	
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ctg ggg gct ccc ggt cag cct gtc cga gcc gat gac tgc agc tcc cac	96
Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His	
20 25 30	
tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg tgt	144
Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys	
35 40 45	
gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg cct	192
Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro	
50 55 60	
ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc cac	240
Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His	
65 70 75 80	
agt ggc tgg gca ggc aag ttc tgt gac aaa gat gaa cat atc tgt acc	288
Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr	
85 90 95	
acg cag tcc ccc tgc cag aat gga ggc cag tgc atg tat gac ggg ggc	336
Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly	
100 105 110	
ggt gag tac cat tgt gtg tgc tta cca ggc ttc cat ggg cgt gac tgc	384
Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys	
115 120 125	
gag cgc aag gct gga ccc	402
Glu Arg Lys Ala Gly Pro	
130	
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 Cys Leu His Leu Val Cys Leu Leu Cys Ile Leu Gly Ala Pro Gly Gln
 10 15 20

cct gtc cga gcc gat gac tgc agc tcc cac tgt gac ctg gcc cac ggc 150
 Pro Val Arg Ala Asp Asp Cys Ser Ser His Cys Asp Leu Ala His Gly
 25 30 35

tgc tgt gca cct gac ggc tcc tgc agg tgt gac ccg ggc tgg gag ggg 198
 Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys Asp Pro Gly Trp Glu Gly
 40 45 50

ctg cac tgt gag cgc tgt gtg agg atg cct ggc tgc cag cac ggt acc 246
 Leu His Cys Glu Arg Cys Val Arg Met Pro Gly Cys Gln His Gly Thr
 55 60 65 70

tgc cac cag cca tgg cag tgc atc tgc cac agt ggc tgg gca ggc aag 294
 Cys His Gln Pro Trp Gln Cys Ile Cys His Ser Gly Trp Ala Gly Lys
 75 80 85

ttc tgt gac aaa gat gaa cat atc tgt acc acg cag tcc ccc tgc cag 342
 Phe Cys Asp Lys Asp Glu His Ile Cys Thr Thr Gln Ser Pro Cys Gln
 90 95 100

aat gga ggc cag tgc atg tat gac ggg ggc ggt gag tac cat tgt gtg 390
 Asn Gly Gln Cys Met Tyr Asp Gly Gly Glu Tyr His Cys Val
 105 110 115

tgc tta cca ggc ttc cat ggg cgt gac tgc gag cgc aag gct gga ccc 438
 Cys Leu Pro Gly Phe His Gly Arg Asp Cys Glu Arg Lys Ala Gly Pro
 120 125 130

tgt gaa cag gca ggc tcc cca tgc cgc aat ggc ggg cag tgc cag gac 486
 Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn Gly Gly Gln Cys Gln Asp
 135 140 145 150

gac cag ggc ttt gct ctc aac ttc acg tgc cgc tgc ttg gtg ggc ttt 534
 Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys Arg Cys Leu Val Gly Phe
 155 160 165

gtg ggt gcc cgc tgt gag gta aat gtg gat gac tgc ctg atg cgg cct 582
 Val Gly Ala Arg Cys Glu Val Asn Val Asp Asp Cys Leu Met Arg Pro
 170 175 180

tgt gct aac ggt gcc acc tgc ctt gac ggc ata aac cgc ttc tcc tgc 630
 Cys Ala Asn Gly Ala Thr Cys Leu Asp Gly Ile Asn Arg Phe Ser Cys
 185 190 195

ctc tgt cct gag ggc ttt gct gga cgc ttc tgc acc atc aac ctg gat 678

Leu Cys Pro Glu Gly Phe Ala Gly Arg Phe Cys Thr Ile Asn Leu Asp			
200	205	210	
gac tgt gcc agc cgc cca tgc cag aga ggg gcc cgc tgt cgg gac cgt			726
Asp Cys Ala Ser Arg Pro Cys Gln Arg Gly Ala Arg Cys Arg Asp Arg			
215	220	225	230
gtc cac gac ttc gac tgc ctc tgc ccc agt ggc tat ggt ggc aag acc			774
Val His Asp Phe Asp Cys Leu Cys Pro Ser Gly Tyr Gly Lys Thr			
235	240	245	
tgt gag ctt gtc tta cct gtc cca gac ccc cca acc aca gtg gac acc			822
Cys Glu Leu Val Leu Pro Val Pro Asp Pro Pro Thr Thr Val Asp Thr			
250	255	260	
cct cta ggg ccc acc tca gct gta gtg gta cct gcc acg ggg cca gcc			870
Pro Leu Gly Pro Thr Ser Ala Val Val Val Pro Ala Thr Gly Pro Ala			
265	270	275	
ccc cac agc gca ggg gct ggt ctg ctg cgg atc tca gtg aag gag gtg			918
Pro His Ser Ala Gly Ala Gly Leu Leu Arg Ile Ser Val Lys Glu Val			
280	285	290	
gtg cgg agg caa gag gct ggg cta ggt gag cct agc ttg gtg gcc ctg			966
Val Arg Arg Gln Glu Ala Gly Leu Gly Glu Pro Ser Leu Val Ala Leu			
295	300	305	310
gtg gtg ttt ggg gcc ctc act gct gcc ctg gtt ctg gct act gtg ttg			1014
Val Val Phe Gly Ala Leu Thr Ala Ala Leu Val Leu Ala Thr Val Leu			
315	320	325	
ctg acc ctg agg gcc tgg cgc cgg ggt gtc tgc ccc cct gga ccc tgt			1062
Leu Thr Leu Arg Ala Trp Arg Arg Gly Val Cys Pro Pro Gly Pro Cys			
330	335	340	
tgc tac cct gcc cca cac tat gct cca gcg tgc cag gac cag gag tgt			1110
Cys Tyr Pro Ala Pro His Tyr Ala Pro Ala Cys Gln Asp Gln Glu Cys			
345	350	355	
cag gtt agc atg ctg cca gca ggg ctc ccc ctg cca cgt gac ttg ccc			1158
Gln Val Ser Met Leu Pro Ala Gly Leu Pro Leu Pro Arg Asp Leu Pro			
360	365	370	
cct gag cct gga aag acc aca gca ctg tgatggaggt gggg			1199
Pro Glu Pro Gly Lys Thr Thr Ala Leu			
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Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys		
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att ctg ggg gct ccc ggt cag cct gtc cga gcc gat gac tgc agc tcc		96
Ile Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser		
20 25 30		
cac tgt gac ctg gcc cac ggc tgc tgt gca cct gac ggc tcc tgc agg		144
His Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg		
35 40 45		
tgt gac ccg ggc tgg gag ggg ctg cac tgt gag cgc tgt gtg agg atg		192
Cys Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met		
50 55 60		
cct ggc tgc cag cac ggt acc tgc cac cag cca tgg cag tgc atc tgc		240
Pro Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys		
65 70 75		
cac agt ggc tgg gca ggc aag ttc tgt gac aaa ggc ttc cat ggg cgt		288
His Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Gly Phe His Gly Arg		
80 85 90 95		
gac tgc gag cgc aag gct gga ccc tgt gaa cag gca ggc tcc cca tgc		336
Asp Cys Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys		
100 105 110		
cgc aat ggc ggg cag tgc cag gac gac cag ggc ttt gct ctc aac ttc		384
Arg Asn Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe		
115 120 125		
acg tgc cgc tgc ttg gtg ggc ttt gtg ggt gcc cgc tgt gag gta aat		432
Thr Cys Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Glu Val Asn		
130 135 140		
gtg gat gac tgc ctg atg cgg cct tgt gct aac ggt gcc acc tgc ctt		480
Val Asp Asp Cys Leu Met Arg Pro Cys Ala Asn Gly Ala Thr Cys Leu		
145 150 155		
gac ggc ata aac cgc ttc tcc tgc ctc tgt cct gag ggc ttt gct gga		528
Asp Gly Ile Asn Arg Phe Ser Cys Leu Cys Pro Glu Gly Phe Ala Gly		
160 165 170 175		
cgc ttc tgc acc atc aac ctg gat gac tgt gcc agc cgc cca tgc cag		576
Arg Phe Cys Thr Ile Asn Leu Asp Asp Cys Ala Ser Arg Pro Cys Gln		
180 185 190		
aga ggg gcc cgc tgt cgg gac cgt gtc cac gac ttc gac tgc ctc tgc		624
Arg Gly Ala Arg Cys Arg Asp Arg Val His Asp Phe Asp Cys Leu Cys		
195 200 205		
ccc agt ggc tat ggt ggc aag acc tgt gag ctt gtc tta cct gtc cca		672
Pro Ser Gly Tyr Gly Gly Lys Thr Cys Glu Leu Val Leu Pro Val Pro		
210 215 220		
gac ccc cca acc aca gtg gac acc cct cta ggg ccc acc tca gct gta		720
Asp Pro Pro Thr Thr Val Asp Thr Pro Leu Gly Pro Thr Ser Ala Val		
225 230 235		

gtg gta cct gcc acg ggg cca gcc ccc cac agc gca ggg gct ggt ctg	768
Val Val Pro Ala Thr Gly Pro Ala Pro His Ser Ala Gly Ala Gly Leu	
240 245 250 255	
ctg cgg atc tca gtg aag gag gtg gtg cgg agg caa gag gct ggg cta	816
Leu Arg Ile Ser Val Lys Glu Val Val Arg Arg Gln Glu Ala Gly Leu	
260 265 270	
ggt gag cct agc ttg gtg gcc ctg gtg ttt ggg gcc ctc act gct	864
Gly Glu Pro Ser Leu Val Ala Leu Val Val Phe Gly Ala Leu Thr Ala	
275 280 285	
gcc ctg gtt ctg gct act gtg ttg ctg acc ctg agg gcc tgg cgc cgg	912
Ala Leu Val Leu Ala Thr Val Leu Leu Thr Leu Arg Ala Trp Arg Arg	
290 295 300	
ggt gtc tgc ccc cct gga ccc tgt tgc tac cct gcc cca cac tat gct	960
Gly Val Cys Pro Pro Gly Pro Cys Cys Tyr Pro Ala Pro His Tyr Ala	
305 310 315	
cca gcg tgc cag gac cag gag tgt cag gtt agc atg ctg cca gca ggg	1008
Pro Ala Cys Gln Asp Gln Glu Cys Gln Val Ser Met Leu Pro Ala Gly	
320 325 330 335	
ctc ccc ctg cca cgt gac ttg ccc cct gag cct gga aag acc aca gca	1056
Leu Pro Leu Pro Arg Asp Leu Pro Pro Glu Pro Gly Lys Thr Thr Ala	
340 345 350	
ct gtga	1062